**CUSTOMER NO. 31013** 177079-00162

## **IN THE CLAIMS:**

1. (Previously presented) A process for the preparation of cellulose acetate comprising:

mercerizing cellulosic material derived from hardwood in a caustic mercerizing solution to produce mercerized hardwood cellulose;

reacting the mercerized hardwood cellulose with an alkylene oxide hydroxyalkylating agent to a degree of substitution of the cellulose ranging from 0.04 to 0.15 to form a reactive mercerized hardwood cellulose, said degree of substitution being insufficient to render said mercerized hardwood cellulose appreciably soluble in water;

recovering said reactive substantially water insoluble mercerized hardwood cellulose and acetylating it at a temperature of at least about 30°C to form cellulose acetate.

- 2. (Previously presented) The process of claim 1, wherein the cellulosic material derived from hardwood is mercerized with a caustic solution of about 8 to 20 weight percent.
- 3. (Previously presented) The process of claim 2, wherein the caustic solution is about 10 to 16 weight percent.
- 4. (Previously presented) The process of claim 2, wherein the reacting of the mercerized hardwood cellulose with an alkylene oxide is carried out in the presence of a caustic solution of the same concentration as the mercerizing solution.
- 5. (Previously presented) The process of claim 1, wherein the cellulosic material is hardwood cellulosic pulp.

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6. (Previously presented) The process of claim 1, wherein the degree of alkylene oxide substitution of the cellulose is from 0.05 to 0.09 moles of alkylene oxide per anhydroglucose unit in said cellulose material.

- 7. (Previously presented) The process of claim 1, wherein the hydroxyalkylating agent is propylene oxide and the degree of substitution of propylene oxide per anhydroglucose unit is from 0.06 to 0.08.
- 8. (Previously presented) The process of claim 1, wherein the cellulose acetate formed has a triacetate haze value not greater than about 6.5.
- 9. (Previously presented) The process of claim 6, wherein the cellulose acetate formed has a triacetate haze value not greater than about 6.5.
- 10. (Previously presented) The process of claim 7, wherein the cellulose acetate formed has a triacetate haze value not greater than about 6.5.
- 11. (Previously presented) A process for the preparation of cellulose acetate comprising:

mercerizing cellulosic material derived from hardwood in a caustic mercerizing solution to produce mercerized hardwood cellulose;

reacting the mercerized hardwood cellulose with an alkylene oxide hydroxyalkylating agent to a degree of substitution of the cellulose ranging from about 0.04 to

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about 0.09 to form a reactive mercerized hardwood cellulose, said degree of substitution being insufficient to render said mercerized hardwood cellulose appreciably soluble in water;

recovering said reactive substantially water insoluble mercerized hardwood cellulose and acetylating it to form cellulose acetate having a triacetate haze value not greater than about 6.5.

- 12. (Previously presented) The process of claim 11, wherein the cellulosic material derived from hardwood is mercerized with a caustic solution of about 8 to 20 weight percent.
- 13. (Previously presented) The process of claim 12, wherein the caustic solution is about 10 to 16 weight percent.
- 14. (Previously presented) The process of claim 13, wherein the reacting of the mercerized hardwood cellulose with an alkylene oxide is carried out in the presence of a caustic solution of the same concentration as the mercerizing solution.
- 15. (Previously presented) The process of claim 14, wherein the cellulosic material is hardwood cellulosic pulp.
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